CLAIMS

What is claimed is:

1. A composition for treating, preventing or normalizing fat maldistribution resulting from anti-retroviral treatment of HIV-1 infection, said composition comprising a conjugated fatty acid or conjugated fatty alcohol and at least one member selected from the group consisting of thiol-containing compounds and bioavailable forms of trivalent chromium.
2. The composition of claim 1, wherein said conjugated fatty acid is selected from the group consisting of a conjugated version of linoleic acid, linolenic acid, gamma linolenic acid, arachidonic acid, mead acid, stearidonic acid, alpha-eleostearic acid, eleostearic acid, pinolenic acid, docosadienic acid, docosatetraenoic acid, octadecadienoic acid, octadecatrienoic acid, eicosatetraenoic acid, eicosapentaenoic acid, docosahexaenoic acid, and docosapentaenoic acid.
3. The composition of claim 1, wherein said conjugated fatty acid is conjugated linoleic acid.
4. The composition of claim 1, wherein said conjugated fatty acid is a triglyceride of conjugated linoleic acid.
5. The compostion of claim 1, wherein said conjugated fatty acid is a diglyceride of conjugated linoleic acid.
6. The compositin of claim 1, wherein said conjugated fatty acid is a monoglyceride of conjugated linoleic acid.
7. The composition of claim 1, wherein said conjugated fatty alcohol is selected from the group consisting of a conjugated version of linoleic alcohol, linolenic alcohol, gamma linolenic alcohol, arachidonic alcohol, mead alcohol, stearidonic alcohol, alpha-eleostearic alcohol, eleostearic alcohol, pinolenic alcohol, docosadienic alcohol, docosatetraenoic alcohol, octadecadienoic alcohol, octadecatrienoic alcohol, eicosatetraenoic alcohol, eicosapentaenoic alcohol, docosahexaenoic alcohol, docosapentaenoic alcohol, and all other diunsaturated and polyunsaturated fatty alcohols.
8. The composition of claim 1, wherein said thiol-containing compound is selected from the group consisting of cysteine, N-acetylcysteine, lipoic acid, methionine,

glutathione, N-acetyl-methionine, taurine, N-(2-mercaptopropionyl)glycine, L-2-oxothiazolidine-4-carboxylate, cysteamine, D-penicillamine, L-cysteine ethyl ester and N,N'-diacetyl-L-cystine.

9. The composition of claim 1, wherein said thiol-containing compound is N-acetylcysteine or lipoic acid.

10. The composition of claim 1, wherein said bioavailable form of trivalent chromium is selected from the group consisting of chromium chloride, chromium tricarnosinate, chromium dicarnosinate, chromium carnitine, chromium nicotinate, chromium carnitinate, chromium arginate, chromium methionate, chromium dinicotinate glycine, chromium tripicolinate, and chromium picolinate.

11. The composition of claim 1, wherein said bioavailable form of trivalent chromium is chromium tricarnosinate.

12. A composition for treating, preventing or normalizing hyperlipidemia resulting from anti-retroviral treatment of HIV-1 infection, said composition comprising a conjugated fatty acid or conjugated fatty alcohol and a thiol-containing compound.

13. The composition of claim 12, wherein said conjugated fatty acid is selected from the group consisting of a conjugated version of linoleic acid, linolenic acid, gamma linolenic acid, arachidonic acid, mead acid, stearidonic acid, alpha-eleostearic acid, eleostearic acid, pinolenic acid, docosadienic acid, docosatetraenoic acid, octadecadienoic acid, octadecatrienoic acid, eicosatetraenoic acid, eicosapentaenoic acid, docosahexaenoic acid, and docosapentaenoic acid.

14. The composition of claim 12, wherein said conjugated fatty acid is conjugated linoleic acid.

15. The composition of claim 12, wherein said conjugated fatty acid is a triglyceride of conjugated linoleic acid.

16. The compostion of claim 12, wherein said conjugated fatty acid is a diglyceride of conjugated linoleic acid.

17. The compositin of claim 12, wherein said conjugated fatty acid is a monoglyceride of conjugated linoleic acid.

18. The composition of claim 12, wherein said conjugated fatty alcohol is selected from the group consisting of a conjugated version of linoleic alcohol, linolenic alcohol,

gamma linolenic alcohol, arachidonic alcohol, mead alcohol, stearidonic alcohol, alpha-eleostearic alcohol, eleostearic alcohol, pinolenic alcohol, docosadienic alcohol, docosatetraenoic alcohol, octadecadienoic alcohol, octadecatrienoic alcohol, eicosatetraenoic alcohol, eicosapentaenoic alcohol, docosahexaenoic alcohol, docosapentaenoic alcohol, and all other diunsaturated and polyunsaturated fatty alcohols.

19. The composition of claim 12, wherein said thiol-containing compound is selected from the group consisting of cysteine, N-acetylcysteine, lipoic acid, methionine, glutathione, N-acetyl-methionine, taurine, N-(2-mercaptopropionyl)glycine, L-2-oxothiazolidine-4-carboxylate, cysteamine, D-penicillamine, L-cysteine ethyl ester and N,N'-diacetyl-L-cystine.

20. The composition of claim 12, wherein said thiol-containing compound is N-acetylcysteine or lipoic acid.

21. A method for treating, preventing or normalizing fat maldistribution resulting from anti-retroviral treatment of HIV-1 infection in a subject comprising: administering to said subject a pharmaceutically effective dose of a conjugated fatty acid or conjugated fatty alcohol in combination with a pharmacologically effective dose of at least one member selected from the group consisting of a thiol-containing compound and a bioavailable form of trivalent chromium or derivates thereof.

22. The method of claim 21, wherein said conjugated fatty acid is selected from the group consisting of a conjugated version of linoleic acid, linolenic acid, gamma linolenic acid, arachidonic acid , mead acid, stearidonic acid, alpha-eleostearic acid, eleostearic acid, pinolenic acid, docosadienic acid, docosatetraenoic acid, octadecadienoic acid, octadecatrienoic acid, eicosatetraenoic acid, eicosapentaenoic acid, docosahexaenoic acid, and docosapentaenoic acid.

23. The method of claim 21, wherein said conjugated fatty acid is conjugated linoleic acid.

24. The method of claim 21, wherein said conjugated fatty acid is a triglyceride of conjugated linoleic acid.

25. The method of claim 21, wherein said conjugated fatty acid is a diglyceride of conjugated linoleic acid.

26. The method of claim 21, wherein said conjugated fatty acid is a monoglyceride of conjugated linoleic acid.
27. The method of claim 21, wherein said conjugated fatty alcohol is selected from the group consisting of a conjugated version of linoleic alcohol, linolenic alcohol, gamma linolenic alcohol, arachidonic alcohol, mead alcohol, stearidonic alcohol, alpha-eleostearic alcohol, eleostearic alcohol, pinolenic alcohol, docosadienic alcohol, docosatetraenoic alcohol, octadecadienoic alcohol, octadecatrienoic alcohol, eicosatetraenoic alcohol, eicosapentaenoic alcohol, docosahexaenoic alcohol, docosapentaenoic alcohol, and all other diunsaturated and polyunsaturated fatty alcohols.
28. The method of claim 21, wherein said thiol-containing compound is selected from the group consisting of cysteine, N-acetylcysteine, lipoic acid, methionine, glutathione, N-acetyl-methionine, taurine, N-(2-mercaptopropionyl)glycine, L-2-oxothiazolidine-4-carboxylate, cysteamine, D-penicillamine, L-cysteine ethyl ester and N,N'-diacetyl-L-cystine.
29. The method of claim 21, wherein said thiol-containing compound is N-acetylcysteine or lipoic acid.
30. The method of claim 21, wherein said bioavailable form of trivalent chromium is selected from the group consisting of chromium chloride, chromium tricarnosinate, chromium dicarnosinate, chromium carnitine, chromium nicotinate, chromium carnitinate, chromium arginate, chromium methionate, chromium dinicotinate glycine, chromium tripicolinate, and chromium picolinate.
31. The method of claim 21, wherein said bioavailable form of trivalent chromium is chromium tricarnosinate.
32. A method for treating, preventing or normalizing hyperlipidemia resulting from anti-retroviral treatment of HIV-1 infection in a subject comprising: administering to said subject a pharmaceutically effective dose of a conjugated fatty acid or conjugated fatty alcohol in combination with a pharmacologically effective dose of a thiol-containing compound.
33. The method of claim 32, wherein said conjugated fatty acid is selected from the group consisting of a conjugated version of linoleic acid, linolenic acid, gamma linolenic

acid, arachidonic acid, mead acid, stearidonic acid, alpha-eleostearic acid, eleostearic acid, pinolenic acid, docosadienic acid, docosatetraenoic acid, octadecadienoic acid, octadecatrienoic acid, eicosatetraenoic acid, eicosapentaenoic acid, docosahexaenoic acid, and docosapentaenoic acid.

34. The method of claim 32, wherein said conjugated fatty acid is conjugated linoleic acid.

35. The method of claim 32, wherein said conjugated fatty acid is a triglyceride of conjugated linoleic acid.

36. The method of claim 32, wherein said conjugated fatty acid is a diglyceride of conjugated linoleic acid.

37. The method of claim 32, wherein said conjugated fatty acid is a monoglyceride of conjugated linoleic acid.

38. The method of claim 32, wherein said conjugated fatty alcohol is selected from the group consisting of a conjugated version of linoleic alcohol, linolenic alcohol, gamma linolenic alcohol, arachidonic alcohol, mead alcohol, stearidonic alcohol, alpha-eleostearic alcohol, eleostearic alcohol, pinolenic alcohol, docosadienic alcohol, docosatetraenoic alcohol, octadecadienoic alcohol, octadecatrienoic alcohol, eicosatetraenoic alcohol, eicosapentaenoic alcohol, docosahexaenoic alcohol, docosapentaenoic alcohol, and all other diunsaturated and polyunsaturated fatty alcohols.

39. The method of claim 32, wherein said thiol-containing compound is selected from the group consisting of cysteine, N-acetylcysteine, lipoic acid, methionine, glutathione, N-acetyl-methionine, taurine, N-(2-mercaptopropionyl)glycine, L-2-oxothiazolidine-4-carboxylate, cysteamine, D-penicillamine, L-cysteine ethyl ester and N,N'-diacetyl-L-cystine.

40. The method of claim 32, wherein said thiol-containing compound is N-acetylcysteine or lipoic acid.